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Consider the following sentences¹:

- (1)
 - a. This takes you to a whole new *level*.
 - b. Charters take people seeking *protection* to Canada.
 - c. An FBI agent was arrested for selling

- c. The state police arrested an illegal immigrant who was unable to produce *documents* (of citizenship, etc., *not* documents stolen from the FBI).
- d. During the forest fire, the Johnson's home was never in *danger* (of being consumed by the fire, *not* of losing its reputation as a master sleuth).

We are going to use the neutral term “understanding” to describe this phenomenon. It is clear from the outset that each of these understandings is not a separate lexeme or dictionary entry; there are too many of them and the understandings are quite clearly relatable to one another, unlike the ambiguity of words like *bank*, *ruler*, *watch*, *hide*, etc. |

It seems these understandings, however, must be represented at some level in the semantics, pragmatics, or psychology, for failing to achieve such an understanding leaves one without an adequate apprehension of the sentences as a whole, as presumably reading the title of this paper alone demonstrates. Suppose we take the extension of a word like *protection* to be the entire set of objects, structures, and actions that offer protection *of any sort whatsoever*. What does this extension look like? It includes insurance policies, weaponry, skin care products, many dogs, few cats, burglar alarms, anti-virus programs, the National Guard, bicycle helmets... certain payments to bullies, good advice from your mother... and so on. It's not at all clear what would be excluded, in the long run. Perhaps clearer examples are the words *clue* and *problem*. We take the point of view that anything whatsoever is (potentially) a clue (to something else) or a problem (for some reason), and

Almost anyone steeped in current semantic theory would immediately consider implicit variables as a solution to the problem just noted. Since Davidson (1967), for instance, it has

On the other hand, if quantifier domain restriction follows from the assignment of value to an implicit variable in the logical form of phrases like *every tennis player* in (7), the relevant restriction is not expected to affect other phrases in the sentence.

2.3. Weak crossover (Take 1)

Since Partee (1989) the literature has considered whether the implicit variables postulated for the interpretation of context-dependent expressions trigger Weak Crossover violations (Lasnik and Stowell, 1991). The Weak Crossover (WCO) Principle is a constraint on the interpretation of pronouns to the effect that a pronoun can only receive a bound variable interpretation if it is c-commanded by a quantified expression in its base position. So, for example, the pronouns *his* in (8a) and (9a) can be interpreted as a variable bound by the quantificational expression *who* and *everyone*, but the same interpretation is not available for the pronoun *his* in (8c) and (9c): comparing the (simplified) logical forms which would derive these interpretations – given in (8b)/(9b) and (8d)/(9d) – it can be seen that the LFs in (8b)/(9b) respect the WCO Principle, while the LFs in (8d)/(9d) violate it.

- (8) a. Who₁ admires his₁ boss?
b. [Who λ₁ [t₁ admires his₁ boss]]
c. *Who₁ does his₁ boss admire?
d. *[Who λ₁ [his₁ boss admires t₁]]
- (9) a. Everyone₁ admires his₁ boss.
b. [Everyone λ₁ [t₁ admires his₁ boss]]
c. *His₁ boss admires everyone₁.
d. *[Everyone λ₁ [his₁ boss admires t₁]]

Partee (1989) notices that similar interpretive restrictions seem to hold of context-dependent expressions like *local*, as evidenced in (10).

- (10) a. Every untenured professor₁ in the state received a letter from the leader of the local₁ union.
b. #The leader of the local₁ union sent a letter to every untenured professor₁ in the state.

The contrast in (10) shows that a bound variable interpretation in which the anchor of words like *local* covaries with the choice of individuals in the domain of a quantificational expression is unavailable when (the base position of) the quantifier does not c-command the context-dependent expression. This

the NP in subject position can be interpreted as if it were bound by the quantifier in object position; on the other hand, this is not an option for overt pronouns, as shown by the parallel examples in (13), which lack the corresponding interpretations presumably because the Logical Forms that would derive them violate the WCO Principle.

- (12) a. A grandparent accompanied every student to graduation.
b. A favorite story helped to put every toddler to sleep.
- (13) a. His grandmother accompanied every student to graduation.
b. His favorite story helped to put every toddler to bed.

3.2. *Locality (Take 2)*

Sentences like (7) show that the process of domain restriction seems to be closely intertwined with semantic composition, the choice of a particular domain having often just a very local

plausible that if the noun *tennis players* subcategorizes for any location argument, this should denote the place where the playing takes place, rather than the place where the

- d. *Every beginning general who loses his first battle switches to a strategy different from that/it in the second.

Martí (ms) attempts a response but, to our minds, does not really address the fundamental issue raised by Partee's original criticism. Something special must be said for implicit variables that does not hold for overt pronouns, and the proponent of the implicit variable approach is left with the burden of having to argue for the "linguistic reality" of the postulated special properties of implicit variables and to explain why no language seems to provide for overt pronouns that share these special properties. No author, to our knowledge, successfully tackles either task.

In addition, as pointed out by Cappellen and Lepore (2002), among others, implicit variables do not lend themselves to functioning as antecedents of subsequent anaphoric expressions (17a), thus differing from the behavior of overt pronouns, which can function as antecedents (17b).

- (17) a. ?Many students failed, and it's a big domain.
b. He's a senator, but nobody respects him.

Possibly, whether a pronominal element is phonologically realized or not might have an effect

We also get indirect types of binding, similar to “Each man went to a local tavern,” where the quantification is over men, and not places:

- (19) Each man was alerted to some danger. (i.e. for each man x there is some cause-of-danger y such that danger(to x , from y))

Note in (24) that the understandings can differ from man to man. That is, one man is alerted to the fact he has an illness, another that he’s being sought by the police, etc.

Given the discussion above, however, we wish to explore an alternative to the implicit variable approach. The alternative is based on situations as explanatory devices, but instead of treating situations as value-assigned targets of implicit anaphoric devices, we instead consider treating them as parameters of evaluation. Our aim here is not to argue the superiority of any alternative, but rather simply to sketch out a viable alternative.

4.1. *Situations are rich*

We take situations to be parts of worlds, as in Barwise and Perry (1983) and Kratzer (1989, 1998). They may be characterized by sets of propositions, and, if two situations are describable by the same set of propositions, they are of the same situation type. Further, situations themselves are *localized* (Barwise and Perry (1983)). Not just any arbitrary subset of propositions one can imagine describes a situation; they have a coherence of sorts brought together by locatedness. Like events, however, locating them precisely in time and space is an uncertain enterprise.

On the view we take here, situations have a structure that is “rich”. Let’s illustrate this in the following way. Take a really, really simple situation, in which there is a horse, and that’s it. One can take the point of view that this alone fully describes a pretty minimal situation. But we’re going to take another point of view, namely, that even seemingly minimal situations

Now

intensions of lexical items are defined only for those world time pairs that fall within the situational restriction, i.e. only if $\langle w, t \rangle \in \cap E$ or $\langle w, t \rangle \in \cap G$ in \mathcal{S} and undefined otherwise (these are partial functions).

To give a flavor for the proposal, let us return to Bob, who we left standing in the path of an avalanche. Now, suppose we comment on Bob's current prospects as follows:

(20) Bob is in some *danger*.

In the current situation, we have Bob standing there and information about avalanches and people. In that type of situation, what constitutes, or counts as, the "danger"? Clearly the potential causer of harm to another constituent of the situation (in this case, Bob). The interpretation of *danger* will then be limited to avalanches—in the situation there are no viruses,

When the value Bob is assigned to x , we now have a proposition ‘Bob is in danger’, which gets evaluated exactly as (20), and when Tom is assigned as the value it is evaluated as (22). While we do not present an explicit account of distributivity (as opposed to quantificational binding), we note that distributivity too defines a series of distinct propositions in instances such as (on the distributive, not the group, reading):

(25) Tom and Bob are in *danger*!

So the general moral is that whenever one has a propositional structure, one has the opportunity to introduce a new situational structure into the evaluation. “Locality” then derives from propositional interpretations, and not directly from the number of quantifiers found in a sentence.

A similar line of reasoning is employed to understand why in sentences like those below, one gets apparent “direct binding”:

(26) Each of the men was in danger. But most of them found *protection*.

With appropriate background, different sets of generalizations come into play for each value assigned to x in [x is in danger]. With appropriate background, this may lead to distinct interpretations assigned [to](#) “danger” for each individual. This situational information serves to evaluate the instances of [x found protection] for the values of x . So, if one of the values is Bob, and crawling into a cave to avoid the avalanche preserves him, then the cave is protection in that situation. The value Tom, in [x found protection], might lead to noting that he climbed a tree to successfully avoid the wolves, and therefore the tree was his protection (and not the cave).

We do wish to point out that the context does not always provide such a strong story as

The proposal made here is that situational parameterization applies to the interpretation of all lexical items (i.e. non-logical expressions). In one way, this broad claim is a good thing, for we know that effects occur not only with respect to nouns, but also with regard to adjectives like *local* or *opposite*, prepositions like *away* or *near*, and verbs like *notice*, *leave*, or *see*, illustrated below:

(28) Gee, it's nice to be able to *see* again.

(Recovered from eye surgery? Get your glasses cleaned? Fog finally lift? The flashlight working? The spectator in front of you finally sit down...?)

~~However~~Perhaps, the probably most interesting issue that ubiquity raises, however, is that we simply do not have a sense of “understandings” with most ~~let's call them~~ normal concrete lexical items, as we do with the more abstract *clue*, *protection*, etc. We just don't seem to see anything different in *meaning* between (29a,b):

- (29) a. Millie bought a *cat*.
b. Mike bought a *cat*.

The sameness of meaning is preserved even under circumstances where-in which the cats bought were of very different types (e.g. a Burmese, and a Persian, or a large orange one and a small grey one...). Even something as widely varied in form as the extension of *(hand)tool* does not lead to similar intuitions (consider w-0.2400000 18 774.0001 cm BT 50 0 0 -5

Ravenous wolves are chasing Bob; he's in danger. The wolves are the very, very slow-running variety, so he's not. The slow-running variety wolves chasing Bob have taken speed drugs – he's in danger again! – and so forth. But throughout, the wolves are animals, Bob is a human, running is a variety of locomotion, - etc.

But not all cases we examined exhibit instability and lack of persistence. Example (1c), an FBI agent being arrested for selling documents, is one such case. Here, the reader tends to make the assumption that the documents in question were secret, sensitive documents, and probably stolen from the FBI. In this instance, the forms of documents is ontologically stable (typically paper or electronic form), but the identity of the documents helps make sense of why the FBI agent was arrested, the cause of his or her arrest. Different types of documents play different causal roles in different legal and social interactions, and it would appear that these distinguished causal roles are behind our understanding of *documents* in this example.

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